# REPORT

ON THE

# SANITARY CONDITION

OF THE

# MALTON URBAN SANITARY DISTRICT

FOR THE YEAR 1894,

 $\mathbf{B}\mathbf{Y}$ 

## HENRY MAINWARING-HOLT,

M.R.C.S., L.S.A., D.P.H., &c.,

MEDICAL OFFICER OF HEALTH.

#### MALTON:

G. J. JONES, PRINTER, "GAZETTE" OFFICE, WHEELGATE.

1895.



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#### THE SANITARY CONDITION

OF THE

#### MALTON URBAN SANITARY DISTRICT

DURING 1894.

### REPORT OF THE MEDICAL OFFICER OF HEALTH

TO THE SANITARY COMMITTEE.

Area of District.—The area of the District is 4,130 acres.

Division of District into Wards.—By an order of the County Council for the North Riding of Yorkshire the Malton Urban District has been divided into the following Wards, viz.:

	WARD.	AREA
No.	NAME.	AREA.
I	The St. Mary's Ward, Old Malton.	The Ecclesiastical Parish of St. Mary's, Old Malton.

This Ward is comprised with the following boundaries:—Commencing at the Thirsk and Malton Railway Bridge over the River Derwent, going Eastward along the centre of the River to its confluence with the River Rye, and including the Hamlet of Wykeham, from thence along the centre of the River Rye, forming the Norton boundary, till it reaches Hazel House Farm, in the Parish of Broughton; leaving the River Rye it runs Westward to the Thirsk and Malton Railway Line and along the centre of the said Railway Line to the aforesaid Bridge over the Derwent.

Atomic Marie Commission	WARD.	AREA.
No.	NAME.	ATKDA.
2	The St. Michael's Ward, New Malton.	The Ecclesiastical Parish of St. Michael, New Malton.

Commencing at the Bridge in Railway Street the boundary is formed by a line passing along the centre of Wells Lane, Upper Castlegate, Wheelgate, and Newbiggin, and along the Hovingham Road to Spital Hill Plantation, abutting upon the Parish of Broughton. Turning to the left it passes along the Western boundary of the Ward, with the parishes of Broughton and Huttons Ambo on the right, to the centre of the River Derwent on the South. From this point it follows the River as its South boundary to the aforesaid Bridge.

	WARD.	AREA.
No.	NAME.	36 36 A C 4 J 4 B 6
3	The St. Leonard's Ward, New Malton.	The Ecclesiastical Parish of St. Leonard, New Malton.

Commencing at the Malton and Thirsk Railway Bridge over the Derwent, the boundary runs along the centre of the said line of Railway to the Parish of Broughton, and turning Southward, having the said Parish of Broughton on the right, continues to the Malton and Hovingham Highway, and along the said Highway to the top of and along the centre of Newbiggin, Wheelgate, and the upper or North end of Castlegate and Wells' Lane, to the Bridge in Railway Street, and from thence along the River to the first-mentioned Bridge on the Thirsk and Malton line of Railway.

Population.—A Census was taken in England and Wales on April 6th, 1891. According to this the number of inhabited houses in the district was 1,014, being 23 less than the number enumerated in the Census taken on April 4th, 1881; and the number of persons in the district was 4,910, being 362 less than the number enumerated in the Census taken on April 4th, 1881.

For the purposes of the Annual Report an estimate is required of the number of persons living in the district at Midsummer, 1894. It was estimated that at Midsummer, 1892, the population was 4,865; for 1893, 4,828 persons. The estimate for 1894 is, in round numbers, 4,793 persons.

Decrease in Population.—During the ten years between the taking of the Census of 1881 and that of 1891, the population of the district had decreased by 362, equal to 6.86 per cent. on the population of 1881. There can be no doubt but that this decrease in numbers steadily continues, and is largely owing to

agricultural depression. As a consequence of the want of employment in agricultural pursuits young men flock into towns, only to find the labour market overstocked, the friction of life increased, with disease and poverty as potent factors of existence. It is not uncommon to find men come home to die after spending their best years in the din and smoke of towns. Under such conditions the death-rates of agricultural districts are distinctly affected, being made to appear higher in comparison with manufacturing districts. The difference is only apparent. real value of a death-rate can only be appreciated when the age constitution of a population and other data are known. is a continuous flow of the young and robust of agricultural populations to towns, whilst those remaining represent, for the most part, ages at the extremes of life. In the former the mortality is very low, while in the latter the mortality is excessive, compared with an average death-rate. It will be obvious, therefore, that no conclusions of any value can be deduced by a bare comparison between the death-rates of two populations differently constituted, hence the death-rate, though useful, is not the true test of the health of districts.

Births and Deaths.—The returns of the local Registrar during the year 1894 recorded 145 births and 56 deaths in the Malton Urban Sanitary District. The natural increase in the population in 1894 was, therefore, 89. Of the births 77 were males and 68 females; of the deaths 33 were males and 23 females.

The following gives at a glance the numbers of Births and Deaths registered during the years 1891, 1892, 1893, and 1894:—

		1891	1892	1893	1894	
Births Death	s	132 105	1 <b>2</b> 9 68	130 102	145 56	·

Birth-rates.—There were 145 births registered during the year 1894, giving a birth-rate of 30.25 per thousand. In 1893 the birth-rate was 26.92 per thousand; in 1892, 26.51 per thousand; and in 1891 it was 26.77 per thousand.

Death-rates.—The number of deaths registered during the year 1894 was 56, giving a death-rate of 11.68 per thousand. Of these deaths 3 did not belong to the district. In 1893 the death-rate was 21.12 per thousand; in 1892, 13.97 per thousand; and in 1891 it was 21.29 per thousand.

The Classification of Death Causes.—The causes of death, as they appear in the following, are systematically arranged in classes and orders; genera, or what in disease would be called varieties, are not distinguished.

	1) <b>1</b>			56
Dec	M F		6 3	6
Nov	H		0 1	7
Oct	FM		9	
	K		0 1	7
s Sep	M		- 71	23
Aug	MF		0	12
July	H			71
June ]	F		3 1	
	K K		-0-	4
May	M		3	3
$\mathbf{A}_{\mathrm{pl}}$	MF		2 2	4
Mar	F		-2	3
	F. W			
Feb	M		4 4	N
Jan	MF		4	$\infty$
Diseases.	5.	Whooping Cough Erysipelas Diphtheria Rheumatism Influenza Purperal Fever Anæmia Phthisis Tabes Mesenterica Convulsions Brain Disease Paralysis Apoplexy Heart Disease Laryngitis Bronchitis Bronchitis Bronchitis Liver Cirrhosis Nephritis Liver Cirrhosis Nephritis Liver Cirrhosis Nephritis Childbirth Senility Senility		
Classes and Orders.		I. Zymotic Diseases  a. Miasmatic  b. Enthetic  a. Diathetic  b. Tubercular  c. Diathetic  b. Tubercular  III. Local Diseases.  a. Nervous System  c. Respiratory Diseases.  d. Digestive Organs  c. Urinary Organs  v. Urinary Organs  v. Developmental Diseases.  Diseases of Adults  Diseases of Adults  V. Violent Deaths.		

The following epitomises the ages at which death occurred, and compares the years 1891, 1892, 1893, 1894;—

			1891		1892		1893		1894
Deaths	under I yea	ar of age	20		8		18		17
,,	over I ,,	and under 5	7	• •	3		ΙΙ	• •	4
,,	,, 5 ,,	,, 15	5	• •	2		2		5
"	,, 15 ,,	,, 25							
"	,, 25 ,,						35		
,,	,, 65 ,,	and upwards	35	• •	25	• •	32	• •	14
	Total dea	ths at all ages	105		68	• •	102	••	56

The grouping together into various ages in the foregoing table is in accordance with the schedule furnished by the Loeal Government Board, which is duly filled in and accompanies this report.

Further particulars as to the deaths in the district for 1894, that is to say, the number registered in each quarter of the year, and the number referred to each Ward, as also to those dying in the Union.

DEATHS IN WARDS.		rst rter.	Sec Qua	ond rter.	Th Qua	ird rter.	Fourth Quarter.		Totals.	
St. Mary's, Old Malton St. Michael's, New Malton St. Leonard's, New Malton Workhouse	M 2 3 4 0	F 2 I 4 0	M 0 2 3 1	F I 3 0	M O I 2 2	F 0 1	M 1 6 3 3	F I 7 I	M 3 12 12 6	F 4 3 15 1
	9	7	6	5	5	I	13	10	33	23

In order that these returns be accurate it is desirable that the Registrar furnish the number of the house in which death took place.

Of the deaths occurring in the district of persons not belonging hereto, there were 5, all males. There is no return of deaths outside the district of persons belonging thereto.

Inquests and Deaths "not certified."—There has been one inquest held during the year 1894. All deaths have been certified, yet it is a matter for regret that such loose terms as Convulsion, Paralysis, Hæmmorrhage, and the like should remain in use, since they do not state the cause of death, but merely symptomatic conditions preceding death.

Zymotic Diseases.—The deaths from zymotic diseases include 5 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz., whooping cough 1, diphtheria 1, erysipelas 1, puerperal fever 1, influenza 1.

The zymotic death-rate for the year 1894 was 1.04 per thousand. In 1893 zymotic diseases caused 17 deaths, and the death-rate from this cause was 3.52 per thousand.

Notification of Cases of Dangerous Infectious Diseases.—The Infectious Diseases (Notification) Act, 1889, and the Infectious Diseases (Prevention) Act, 1890, also Part III. of the Public Health Acts Amendment Act, 1890, have been in operation since the 9th of November, 1891.

Thirty-nine cases of infectious diseases were notified to me during the year 1894. Of these cases 11 occurred in Old Malton Ward, 3 in St. Michael's Ward, 22 in St. Leonard's Ward, and 3 in the Workhouse. Of these 2 did not belong to the district.

Smallpox.—Only one case of smallpox has been reported to me during the year 1894, and, as in 1893, the disease was introduced by a tramp; fortunately the case was of a mild character, and due precautions were taken by those in attendance. There can be no doubt that the frequenters of casual wards in Workhouses, as well as those who seek shelter in low class common lodging-houses, are active agents in the spread of diseases of both infectious and contagious characters. The systematic inspection of tramping "casuals" will do something to lessen the evil, but a wider control over common lodging-houses, of whatever name, would do more; the habitues of such places care little for themselves and nothing for others.

Scarlatina.—Of the 11 cases reported, one contracted diphtheria and died, the rest recovered. Again there is evidence which leads to the belief that the first case was imported from Scarboro', as was the case in 1893.

Erysipelas.—There were 14 cases of erysipelas reported during the year 1894, with one death resulting therefrom. It would be helpful if the various forms of this disease were indicated in the cases notified.

Diphtheria.—Eight cases of this disease were notified, one proving fatal in a case previously notified as suffering from scarlatina. A great advance has been made in the study and treatment of this disease during the year 1894, and Sanitary Authorities generally ought to take advantage of the means at their disposal for the detection and prevention of this dread scourge.

Enteric Fever.—Four cases have been notified, one did not belong to the district. There has been no death reported from this cause. There appears to be some custom which allows of infectious cases being sent from the outlying rural districts into the Union Workhouse situate in your district. I am of

opinion that such a proceeding is wrong, and may endanger the life of the infected sufferer, in addition to menacing the health of your district. Provision should be made for such cases outside the town.

Puerperal Septicæmia.—Only one case of this disease occurred in the district, and this proved fatal.

It will be noted from the subjoined tabular return that no infectious case was notified during the month of July. There have been no deaths from enteric or typhoid fever during the years 1892, 1893, and 1894, these facts are important taken in connection with the nature of the water supply. The Medical Officer of Health and Sanitary Inspector have together, and separately, visited the premises upon which cases of infectious disease have occurred, enquired into the sources of milk supply, schools attended, water supply, drainage, and other matters which were deemed necessary. General and specific instructions have been given at the time of the visit, and disinfectants supplied gratis if found requisite.

The cases notified during the year appear in the subjoined tabular return, and also in the schedule which accompanies this report, in conformity with the requirements of the Local Government Board.

	Notifiable Diseases.	Jan	Feb	Mar	Apr	May	June	July	Rank	och.	Nov	Dec	Ttl.
1 2 3 4 5 6 7 8	Smallpox Scarlatina Diphtheria Membranous Croup Typhus Fever Typhoid Fever Continued Fever Relapsing Fever Puerperal Fever					1	1		2	2	6	3 1	1 11 8 0 0 4 0 0
10	Cholera Erpsipelas	1	1	5	1	1			1	2	1	1	0 14
-		1	1	5	2	3	5	0	3	5	8	5 1	39

Meteorological Results. — Meteorological fluctuations constitute important factors of disease and health. The conditions of "weather" during 1894 have in all probability greatly influenced the death-rate throughout the United Kingdom, rendering it lower than it has been for years. The Meteorology for the year 1894 has been kindly furnished by Mr. E. K. Spiegelhalter, F.R.Met.S., from daily observations taken by him at Malton (vide Appendix).

The Proposed Isolation Hospital.—I regret to report that this question is still where it was in my Annual Report for 1893. In my monthly report for March, 1893, I furnished information extracted from a report by twenty-eight separate Health Officers holding office in various parts of the kingdom, and having reference to the amount of accommodation, establishment expenses, regulations in force, &c., &c. I also pointed out that in small districts the question of providing accommodation had been solved by neighbouring authorities forming a combination, each contributing to the support and cost of the building. With reference to the use of converted cottages, I am of opinion that such are far from economical and almost always inadequate.

Water Supply.—The subject of the Water Supply to the district has received marked attention during the year, with the result that no complaint has reached me either with regard to the quality or quantity supplied. The work of clearing out the area of the pools, and the heightening of the surrounding embankments, has been carried out in an efficient manner. Certain modifications of the original scheme, as set forth in the Special Report on the Water Supply furnished by the Surveyor and myself, have of necessity been made, owing to the agent of Earl Fitzwilliam withholding the necessary sanction for the work to be carried out as set forth in the afore-mentioned report.

The modifications that have been adopted are as follows:—
(1) No penstocks have been put down as indicated in the plan which accompanied the Special Report. (2) An embankment, continuous with that between the Cut and the Pools, has been extended to the embankment of the N.E.R. Co. (3) A new penstock has replaced the old sluice which was situate between the area of the Pools and the Cut.

So far as I am able to judge of the result of the work, it has been done admirably and will without doubt prove efficient in preventing discolouration of the water supply in times of flood.

The supply of water is a copious one, in fact, far more runs to waste than is used.

The water main has been extended from Old Malton to Eden House, Howe Bridge, and Wykeham, replacing supplies of very doubtful character.

Housing of the Working Classes.—In my report for the month of June I directed your attention to certain cases of overcrowding existant in various parts of the district, and pointed out the great danger to health of the inmates, especially to the younger and more helpless members of the family, no less than the lowering of the standard of common decency among the older members of the family. Unfortunately the remedy for this condition of affairs is not readily available in your district; there

is a deplorable absence of suitable houses for working men with average families. Speaking generally, the houses now occupied by working men in your district are too small, often huddled together, with defective lighting and ventilation, most of such dwellings are old and damp, falling out of repair and unfit for habitation.

I am glad to be able to report that some interest has been shown in this matter. At a meeting of the Sanitary Committee on Monday, the 23rd day of July, it was resolved that the Clerk be, and he is hereby directed to communicate with Mr Markham on this important subject, asking him in the interests of the said ratepayers and the class of workmen referred to, to advise his lordship (Earl Fitzwilliam) to grant more favourable facilities herein than heretofore, with a view of encouraging people to build within the boundaries of this district, thereby removing the present disadvantages of insufficient cottage accommodation and the evils of overcrowding consequent thereon. Such communication having been made, Mr. Markham replied "that he would be glad to consider any application to lease land with the object of erecting workmen's cottages." At a subsequent meeting of the Sanitary Committee it was decided that a deputation, consisting of certain members of the Board, wait upon Mr Markham with a view of ascertaining full and definite particulars respecting the terms and conditions upon which Earl Fitzwilliam will be prepared to lease land. The deputation have not yet met Mr. Markham owing to election changes having taken place; it will devolve, therefore, upon the members of the Council to determine what further action they intend to take, whether they will acquire such land as they require by purchase or by lease. The whole question is of vital importance to the well-being of your district, and requires your early and earnest attention in order that steps be taken to prevent the continuance of the evils attendant upon insufficient accommodation for the working classes.

Sale of Food and Drugs Act, 1875.—In every district a competent person may be (and, if required by the Local Government Board, must be) appointed as Public Analyst (Sect. 10), and any person shall be entitled to have any drug or article of food purchased by him in such district analysed by the Public Analyst on payment of a sum not exceeding 10s. 6d., and to receive from him a certificate of the result of the analysis (Sect. 12).

In my previous Annual Reports I have suggested the desirability of appointing a Public Analyst to whom samples of foods and drugs offered for sale might be submitted, and I again ask you to give this matter your consideration, since up to the present no action seems to have been taken to protect the public in this important direction.

Dairies, Cow Sheds, and Milk Shops Order, 1885.— The regulation of Dairies, Cow Sheds, and Milk Shops, and the supervision of Milk Sellers has had systematic attention during the year. Special care is taken that the ventilation, lighting, cleansing, drainage, and water supply on the premises used for the milk trade are thoroughly efficient. It is of the greatest importance that all such premises should be strictly inspected before their registration.

Ordinary Sanitary Operations.—The ordinary sanitary operations have received unremitting attention, the pail system has been gradually extended, replacing the old midden system, of which few representatives remain. The houses of the better class in the district are furnished with water closets, and, with a few exceptions, these are of modern type.

House-to-house inspections of cottage property have been made, gulleys, passage drains, &c., have been scoured and kept in order, and the systematic removal of ashpit refuse, at stated intervals, has been carefully superintended.

Nuisance Abatement.—The summary of nuisances investigated and dealt with during 1894, as usually returned to the Local Government Board on a form supplied, is as follows:—

Number of	Nuisances	reported	21
,,	,,	abated after notice	17
,,	, ,	receiving attention	2
,,	22	for which promises to abate has been given	4
,,	,,	on which no action has been taken	8
, ,,	,,,	not entered in Journal or no formal notice given	43
Arrears of	Nuisances	from year 1893	29
"	,,	abated	27
,,	,,	unabated	2

There has been great progress made during the past three years in the removal of nuisances arising from defective drainage, privies, cesspools, areas, gullies, water-closets, accumulations of filth, and the like conditions, nevertheless much remains to be done in the way of careful superintendence and systematic inspection in order to prevent the recurrence of nuisances which may be attributed to carelessness for the most part.

Public Water Closets and Urinals.—During the year 1893 two Water Closets were erected for the use of the public. One situate in Chancery Lane for females, the other near Mr. Cressey's, in the Market Place, for males. The Urinal which was situate in Railway Street has been removed, provision having been made in the yard adjoining the previous site by utilising a building for the purpose.

Roads and Footpaths.—The following have received attention during the year 1894:—

MAIN ROADS (Malton and Pickering).—In addition to ordinary repairs, the sides of the road have been made up for half the distance of the section, and the new Footpath has been extended to Howe Farm, much to the comfort of travellers thereon.

The Footpath along Castle Howard Road has been extended over 200 yards, and awaits further extension.

In the Town.—Yorkersgate has been covered with tarred whinstone, and finished with tarred annealed slag; this was a much-needed improvement. Old Maltongate has been coated with whinstone, and about 300 yards of asphalte footpath added at the North side between East Mount and Love Lane. The South and East sides of the Market Place, St. Michael's Street, and Saville Street, which have been coated with tarred material in recent years, are, in my opinion, much more conducive to health than the old so-called puddle roads.

The Factory and Workshops Acts, 1878, 1883, & 1891, form a rather complicated body of legislation, the effect of which is to make the Sanitary Authority primarily responsible for the sanitary condition of "workshops," the supervision over "factories" being left in the hands of the Factory Inspectors specially appointed by the Home Office. The broad line of distinction between the two classes of work places being the use of mechanical power.

The various workshops in the district have been visited, and notes have been taken of the space, light, ventilation, cleansing, and other sanitary arrangements.

Common Lodging Houses.—During the year the whole of the Common Lodging Houses in the district have been inspected, and occasional visits made from time to time as was deemed necessary. No case of infectious disease has been reported to me as existing in any one of the Common Lodging Houses during the year 1894. In another part of my present report I have referred to the desirability of Sanitary Authorities having a larger control of lodging houses, especially common lodging houses, which at present are in no way safeguarded from receiving cases of infectious and other diseases. It should not be the duty of the lodging house keeper to detect disease, it should be the duty of the State.

Bye-Laws.—Your present Bye-Laws have been in existence for over thirty years, and I am of opinion that they now require careful revision and and extension. This matter is of the greatest importance, especially when considered in the light of present-day knowledge of sanitation, since without proper Bye-

Laws it becomes a difficult matter to carry out those requirements which are necessary to the welfare of your district.

Public Playground.—The question of providing a Public Playground still remains in much the same position as it was in my Annual Report for 1893.

(Signed)

## HENRY MAINWARING-HOLT,

MEDICAL OFFICER OF HEALTH.

JANUARY, 1895.

#### APPENDIX.

### SCHEDULE OF NUISANCES

From Inspector's Journal for Year ended Dec. 31st, 1894.

Among of Nuisances brought forward	1894.	189	3. 1	892.	Total.						
Arrears of Nuisances brought forward from previous years  Do. abated  Do. unabated		. 27		$\frac{27}{27} \dots$	27						
No. of Premises on which Nuisances have been reported for the present											
year No. of Nuisances reported	18.	•	• •	• •	18						
or of which no formal notice given No. of Nuisances abated after notice ,, ,, receiving attention	$\frac{17}{2}$ .	•	• •	• •	43						
abate have been given  No. of Nuisances on which no action	4.	•	• •	• •	4						
has been taken	8 .		• •		8						
DETAILS OF NUISANCES REPORTED, 1894.											
Descriptions.	No. under each description	No. abated	Receiving attention.	Promises of Abatement.	No action taken.						
Ashphalting (defective)	$\begin{bmatrix} 2 \\ 4 \end{bmatrix}$	2									
Buildings (dangerous) Cellars (undrained) Cellar drains (defective) Cesspools (insanitary) Drainage (defective) Gullies (defective) Lighting (defective) Privies (defective) Roadways (dangerous) Spouting (necessary or defective) Ventilation (necessary or defective)	1 2 2 2 6 4 1 1 1 1 4	1 1 5 3 1 1	1	1	1 1 3						
Cellars (undrained) Cellar drains (defective) Cesspools (insanitary) Drainage (defective) Gullies (defective) Lighting (defective) Privies (defective) Roadways (dangerous) Spouting (necessary or defective)	1 2 2 2 6 4 1 1 1	1 5 3 1 1	-	1	1						

ROBT. RICHARDSON,

Sanitary Inspector.

## METEOROLOGICAL RECORD, 1894.

	$\Gamma$	EMPERAT	URES.		Mean	
				1	Max.	
-	Absolute	Absolute	Mean	$\mathbf{M}\mathbf{ean}$	and	Mean
	Max. Date.	Min.		Min.		Air.
Jan. 26th	$52.42 \dots 6th$	1	48.48	30.08	39.28	37.55
Feb. $2nd \dots$	54.97 20th	21	45.51	32.49	39	39 44
Mar. 27th	64.88 17th	23 96	52.70	33.42	43.06	45.09
April 3rd	65.47 22nd	29 02	57.20	38	47.60	49 70
May 15th	63.47 21st	22	56.50	34.86	45.73	49.19
June 30th	79 92 7th	41.	62.22	48.79	55.50	56.87
July 5th	80· 15th	41.	65.13	49.84	57.48	61.45
Aug. 9th	68 93 31st	40.	68 64	46 82	55.85	$59\ 54$
Sept. 9th	72.49 29th	29.50	61.65	39.85	50 99	50 73
Oct. 7th	62· 23rd	24.	53.65	39 26 •	46.45	45.16
Nov. 3rd	59.92 29th			37.23		
Dec. 2nd	54 97 29th	23.50	47.79	35.16	41.47	41.34
	-			darm, majorajorjosp		
Mean	64.78	27.29 .	. 57.13	38.81	49 26	48.44
4.7 7 4	78.00 47.7 78.00	00 7 /7	# 1 T T T			

Absolute Monthly Max, 80 deg on the 5th July; Absolute Min., 1 deg. on the 6th January. Mean Max. Monthly Temperature, 68.64 in August. Mean Monthly Min., 30.08 in January.

				Night	S			
	Daily		Total	32. or		Dew	$\operatorname{Rel}$	ative
	Range.		Range.	below		point.	Hum	idity
January	18.40	• •	49.42	 13		$^{}32\cdot$		8Õ·
February	13.02		33 97	 9		34 9	• •	$84 \cdot$
March	19.28	• •	40.10	 10		38.6		$79 \cdot$
April	19.20		36.45	 4		43.4		78.
May	21.64		41.47	 4		423		$77 \cdot$
June	13.43	• •	38.92	 1		51.1		81
July	<b>15</b> ·29		$39 \cdot$	 distriction		59.2		$92 \cdot$
August	18.02		$28 \ 93$	 -	• •	53.8	J .	81.
September	$21 \cdot 20$		42.99	 1		48.6		$92 \cdot$
October	14.39		$38 \cdot$	 3		40.7		84.
November	<b>15·1</b> 9		28.42	 3		39 <b>1</b>		$77 \cdot$
December	12.63		31.47	 13		35.6		80.
	***************************************		***************************************					-
	16.80		28.07			43.2		80.

	BAROM	ET.	RIC P	RE	SSURE.				
	Absolute				Absolute	)			Total
	Max. in.		Date.		Min. in.	,	Mean.	$\mathbf{R}$	ange.
January 3rd	30.75		$30 \mathrm{th}$	• •	29 40		29.955		1.35
February 20th	30.66	• •	7 h		29.55	4.	30 105		1.11
March 25th	30.70		13th		$29 \cdot 25$	• •	30 065		1.45
April 20th	30.33		$27 \mathrm{th}$	• •	29  50	• •	29.066		$\cdot 85$
May 1st	30.30		$29  ext{th}$		29.45		29784	• •	$\cdot 85$
June 29th	30.50		$5\mathrm{th}$		29 40		29878		1.10
July 25th		• •	$18  ext{th}$		29.55		30.003		1.01
August 26th			$10 \mathrm{th}$		29.30	• •	29963	• •	·8 <b>5</b>
September 26th	30.50		8 h		29.40	• •	30.786		1.10
October 3rd	30.34		$25\mathrm{th}$		28 94		30.700		1.40
November 30th	30.40		12 h		29.10		29.759		1.30
December 28th	30.50		$23\mathrm{rd}$		29 10		$29\ 223$		1 40
						1			
	30.474				29.337		30.015		1.144

Absolute Max. Barometer, 30 75 in. on January 3rd. Absolute Min., 28 94 on October 25th. Mean Monthly Max., 30 786 in September. Mean Monthly Min., 29 223 in December.

Max. Range, 21.64 in May. Min Range, 12.63 in December. Max. number of nights 32. or below, 13 in January and December. The Min., 1 in June and October Monthly Max Range of Temperature, 49.42 in January Min, 28.42 in November.

#### RAINFALL.

	Total	G	reatest f	all in	24 hours.	No	of days
	Depth		Depth		Date.	1	ain fell.
January	1.92		•21		8th	• •	18
February	2.77		•63		10th		14
March	1.36	• •	·51		$12 \mathrm{th}$	• •	12
April	1.50	• •	·53		16th	• •	15
May	2.72		•40		$26 \mathrm{th}$		21
June	3.89		.91		4th		15
July	2.21	. •	$\cdot 45$		23rd		14
August	3.75		•50	• •	8th	9, 0	17
September	1.27		•45		$7 \mathrm{th}$		8
October	3.84		.81		$20\mathrm{th}$	• •	<b>2</b> 1
November	1.44		•45		13th		15
December	3.18		•70		31st	• •	18
	AND THE PARTY OF SAME						
	29.85		6.57				188

#### RAINFALL.

Greatest fall in 24 hours.										
	Depth.		Depth		Depth		Date.		of days	
	1891.		_ 1	1892				rain fell.		
January	1.32		1.41		•46		11th	• •	11	
February	.03		1.90		•50		$20\mathrm{th}$		18	
March	1.69		.96		.25		12th		13	
April	1.60		1.76		.92		27th		13	
May	1.60		3 60		1.20		27th		21	
June	.97		4.45		1.52		28th		18	
July	3.52		1.41		.87	• •	19th	• •	9	
August	4.41		2.64		.81		29th		16	
September	· <b>8</b> 9		1.54		•40		29th		12	
October	3.62		5.61		1.80		14th		26	
November	3'06		1.63		•39		4th		16	
December	2.79		1.26		•51		9th	• •	11	
	-				-		4 }			
	25.50		28.17	• •	9.63				184	

#### RAINFALL.

		G	reatest	fall in	24 hours.	N	o. of days
<b>18</b> 93.	Depth.		Depth.		Date.		rain fell.
January	$1.\overline{27}$	• •	$\cdot \dot{2}2$	• •	31s <b>t</b>	• •	17
February	2.94	• •	·87		$25  ext{th}$		19
March	0.25		.11	• •	3rd	• •	5
April	0.41		$\cdot 22$		16th		6
May	2.85		1.02	• •	$28  ext{th}$	• •	12
$June \dots$	1.33		•40		4 h		10
July	3.23		.71		$10  ext{th}$		18
August	1.76	• •	•50		1st	• •	15
September	$1 \cdot 22$		$\cdot 27$		$25 \mathrm{th}$	• •	14
October	$2 \cdot 27$		.78		$7 \mathrm{th}$		12
November	2.83		•68		$18 ext{th}$	• •	20
December	<b>2·5</b> 9	• •	.76		$12 \mathrm{th}$	• •	19
	22.05		0.74				1.07
	22.95		6.54				167

Mean monthly rainfall 2.487 in.; 1891, 1 201 in; 1892, 2 346 in; 1893, 1.912 in. No. of days rain 1891, 171; 1892, 184; 1893, 167; 1894, 188. Mean of the four years, 177 Twenty one days rainfall more than 1893, and 11 days more than the average.

Greatest amount of rain in 24 hours, June 4th '91 in. Max. monthly fall in June, 3.89. Min. monthly fall in September, 1.27

On the 21st and 22nd of December a tremendous storm passed over the district, the estimated force of the wind during the two days being 80 to 85 miles per hour. Fortunately the immediate district escaped very serious damage.

Mean temperature 48 44, being 2 99 colder than 1893.

The Lowest Temperature occurred on January 6th-1, or 31 deg. of frost.

The Maximum Temperature, 80 on the 5th July.

The number of nights 32 deg and below, 61, being 17 nights less than 1893.

Mean Daily Range, 16.80.

- ,, Total Range, 79.
- " Dew Point, 43.2
- " Relative Humidity, 80.
- ., Maximum Temperature, 57 13.
- " Minimum Temperature, 38 81.
- ., Cloud, 5 67.
- wind Pressure (Beaufort scale) 4.39, equal to approximate mean average rate of 26 miles per hour. Wind direction: Principally south-westerly Specially noticeable feature being the comparative absence of northerly winds throughthe year

Barometric Pressure, steady.

Mean	Temperature	• •				below the average.
11	Minimum					below ,
,,	Maximum	• •		• •	• •	below ,,
,,	Relative Humidity					below ,,
11	Cloud	• •			• •	11
**	Sunshine					below .,
19	Wind Pressure				• •	99
Electr	ical Disturbance		• •			very slight.



